
Monograph number: 6962.

Title: Oleandomycin.

CAS Registry number: [3922-90-5]

Drug code(s): PA-105;

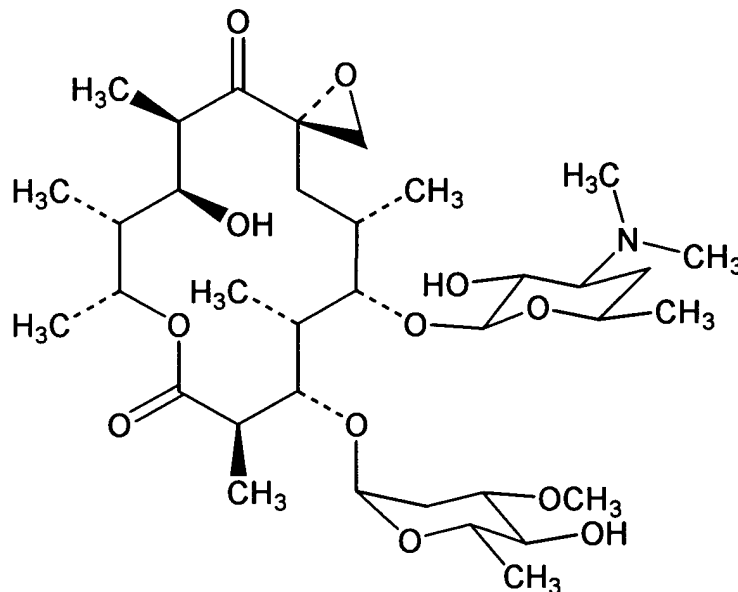
Trade name(s): Amimycin; Landomycin; Romicil.

Molecular formula: C₃₅H₆₁NO₁₂;

Molecular weight: 687.87.

Percent Composition: C 61.11%, H 8.94%, N 2.04%, O 27.91%.

Literature references: Antibiotic substance produced by *Streptomyces antibioticus* no. ATCC 11891: Sobin *et al.*; Ratajak, Nubel, U.S. pats. **2,757,123**; **2,842,481** (1956, 1958 to Pfizer). Structure: Hochstein *et al.*, *J. Am. Chem. Soc.* **82**, 3225 (1960). Absolute configuration: Celmer, *ibid.* **87**, 1797 (1965); Celmer, Hobbs, *Carbohydr. Res.* **1**, 137 (1965); S. Omura *et al.*, *Tetrahedron Letters* **1975**, 2939. Synthetic study: K. Tatsuta *et al.*, *ibid.* **29**, 3975 (1988). Activity: Hahn, *Antibiotics* **1**, 378, 755 (1967). For a review of macrolide antibiotics see Keller-Schierlein, *Fortschr. Chem. Org. Naturst.* **30**, 313-460 (1973). Toxicity: H. Sous *et al.*, *Arzneimittel-Forsch.* **8**, 386 (1958).



Properties: White amorphous powder. uv max (methanol): 286-289 nm . Moderately sol in water. Sol in dil acids. Freely sol in methanol, ethanol, butanol, acetone. Practically insol in hexane, carbon tetrachloride, dibutyl ether.

Derivative: Hydrochloride,

Molecular Formula: $C_{35}H_{61}NO_{12}.HCl$,

CAS Registry: [6696-47-5]

Properties: long needles from ethyl acetate, mp 134-135°. $[\alpha]_D^{25}$ -54° (methanol). Freely sol in water. Forms various cryst hydrates. LD₅₀ in mice, rats (mg/kg): 8200 , >10000 orally ; 600 , 400 i.v. (Sous) .

Melting Point: mp 134-135°

Rotation: -54°

Derivative: Phosphate,

Molecular Formula: $C_{35}H_{61}NO_{12}.H_3PO_4$,

CAS Registry: [7060-74-4]

Trade name(s): *Matromycin (Pfizer)* .

Derivative: Triacetyl deriv *see* Troleandomycin.

THERAP CAT: Antibacterial.

THERAP CAT (VET): Antibacterial.

UV Maxima: 286-289